# Fruits, Vegetables and Weight Management

Did you know that fruits and vegetables could help manage your weight? The Department of Health and Human Services Centers for Disease Control and Prevention puts out a lot of information on nutrition and healthy eating. Fruit and vegetable are part of a well-balanced and healthy eating plan. There are many different ways to lose or maintain a healthy weight. Using more fruits and vegetables along with whole grains and lean meats, nuts, and beans is a safe and healthy one. Helping control your weight is not the only benefit of eating more fruits and vegetables. Diets rich in fruits and vegetables may reduce the risk of some types of cancer and other chronic diseases. Fruits and vegetables also provide essential vitamins and minerals, fiber, and other substances that are important for good health.

The research that we cover in this brief will support the conclusion that replacing foods of high energy density (high calories per weight of food) with foods of lower energy density, such as fruits and vegetables, can be an important part of a weight management strategy.

To lose weight, you must eat fewer calories than your body uses. This doesn't necessarily mean that you have to eat less food. You can create lower-calorie versions of some of your favorite dishes by substituting low-calorie fruits and vegetables in place of higher-calorie ingredients. The water and fiber in fruits and vegetables will add volume to your dishes, so you can eat the same amount of food with fewer calories. Most fruits and vegetables are naturally low in fat and calories and are filling. As people become less active, their bodies need fewer calories. Even if you do not need to lose weight, you may still need to reduce calories simply to maintain your current weight.



## **Energy Density and Volume**

Energy density is the relationship of calories to the weight of food (calories per gram). Foods high in energy density have a large number of calories relative to their weight or volume (4 to 9 calories per gram of weight). Foods high in energy density include low-moisture foods like crackers and cookies or high-fat foods like butter and bacon.

Foods with medium energy density range from 1.5 to 4 calories per gram of weight. Examples include hard-boiled eggs, dried fruits, bagels, broiled lean sirloin steak, hummus grape jelly, whole wheat bread, and part-skim mozzarella.

Foods low in energy density have 0.7 to 1.5 calories per gram; those very low in energy density range from 0 to .6 calories per gram. Examples of foods in these two groups include tomatoes, cantaloupe, broth-based soups, fat free cottage cheese, fat free yogurt, strawberries, broccoli, and turkey breast roasted with no skin. Most fresh fruits and vegetables fall into one of these two categories.

Short-term studies (mostly conducted over several days with limited food options) described in the following section indicate that feeling full is more likely to make a person stop eating than is the total caloric content of the food consumed. Many people believe that consuming high-calorie foods will make them feel full, but a study by Duncan and colleagues provided contrary evidence. In their study, 20 obese and non-obese participants ate as much as they wanted over 5 days from a diet that alternated from low-energy-density to high-energy-density foods. On the low energy-density diet, the participants felt full with just over half the calories (1570 kcal) they needed to feel full on the high-energy-density diet (3000 kcal).

For the same number of calories, people can eat foods with low energy density in greater volume than foods with high energy density. This helps people feel full and yet consume fewer calories.

# Here are some simple ways to cut calories and eat fruits and vegetables throughout your day:

### Breakfast: Start the day right

Substitute some spinach, onions, or mushrooms for one of the eggs or half of the cheese in you morning omelet. The vegetables will add volume and flavor to the dish with fewer calories that the egg or cheese.
Cut back on the amount of cereal in your bowl to make room for some cut-up bananas, peaches, or strawberries. You can still eat a full bowl but with fewer

## **Lighten Up Your Lunch**

calories.

- ❖ Substitute vegetables such as lettuce, tomatoes, cucumbers, or onions for 2 ounces of the cheese and 2 ounces of the meat in your sandwich, wrap, or burrito. The new version will fill you up with fewer calories than the original.
- ❖ Add a cup of chopped vegetables, such as broccoli, carrots, beans or red peppers, in place of 2 ounces of the meat or 1 cup of noodles in your favorite broth-based soup. The vegetables will help fill you up, so you won't miss those extra calories.

#### Dinner

Add in 1 cup of chopped vegetables such as broccoli, tomatoes, squash, onions, or peppers, while removing 1 cup of the rice or pasta in your favorite dish. The dish with the vegetables will be just as satisfying but have fewer calories than the same amount of the original version.

#### **Smart snacks**

❖ Most healthy eating plans allow for one or two small snacks a day. Choosing most fruits and vegetables will allow you to eat a snack with only 100 calories.

About 100 Calories or Less
* A medium-size apple (72 calories)
* A medium-size banana (105 calories)
* 1 cup steamed green beans (44 calories)
* 1 cup blueberries (83)
* 1 cup grapes (100 calories)
* 1 cup carrots (45 calories), broccoli (30 calories), or bell
peppers (30 calories) with 2 tbsp. Hummus (46 calories)

Instead of a high-calorie snack from a vending machine, bring some cutup vegetables or fruit from home. One snack-sized bag of corn chips (1 ounce) has the same number of calories as a small apple, 1 cup of whole strawberries, AND 1 cup of carrots with ½ cup of low-calorie dip. Substitute one or two of these options for the chips, and you will have satisfying snack with fewer calories.



#### **Remember: Substitution is the key**

It's true that fruits and vegetables are lower in calories than many other foods, but the do contain some calories. If you start eating fruits and vegetables in addition to what you usually eat, you are adding calories and may gain weight. The key is substitution. Eat fruits and vegetables instead of some other higher-calorie food.

## Fruits and Vegetables for Weight Control

Eat fruits and vegetables the way nature provided – or with fat-free or low fat cooking techniques. Try steaming your vegetables, using low-calorie or low-fat dressings, and using herbs and spices to add flavor. Some cooking techniques, such as breading and frying, or using high-fat dressings or sauces will greatly increase the calories and fat in the dish. And eat your fruit raw to enjoy its natural sweetness.

- ❖ Canned or frozen fruits and vegetables are good options when fresh produce is not available. However, be careful to choose those without added sugar, syrup, cream sauces, or other ingredients that will add calories.
- \* Choose whole fruit over fruit drinks and juices.

- Fruit juices have lost fiber from the fruit. It is better to eat the whole fruit because it contains the added fiber that helps you feel full. One 6-ounce serving of orange juice has 85 calories, compared to just 65 calories in a medium orange.
- ❖ Whole fruit gives you a bigger size snack than the same fruit dried for the same number of calories. A small box of raisins (1/4 cup) is about 100 calories. For the same number of calories, you can eat 1 cup of grapes.
- \* The information was taken from the CDC Research to Practice Series, No. 1.





#### **Want More Information?**

Check out these Web sites for more information about how fruits and vegetables can help you manage your weight:

- ❖ Centers for Disease Control 5 A Day Web site: www.cdc.gov/5aday
- ❖ US Department of Agriculture, Center for Nutrition Policy and practice: www.usda.gov/cnpp
- ❖ National Cancer Institute: http://www.5aday.gov
- ❖ Produce for Better Health Foundation: <a href="http://www.5aday.">http://www.5aday.</a>



# Josephine's Baked Salmon:

Submitted by Josephine Valencia. This salmon was a favorite at the C2CEN Christmas party!

#### Ingredients

2 cups chopped onion

1 ½ cups chopped green pepper

1 can tomatoes (14.5 ounces)

34 cup picante sauce

2 cloves garlic, minced

2 teaspoons ground cumin

2 cans black beans (drained and rinsed)

10 corn tortillas (7 inch)

2 cups grated Monterey Jack cheese (8 ounces)

Fresh shredded Lettuce

Fresh red chili peppers (optional)

#### **Directions:**

In a large skillet combine onion, green pepper, undrained tomatoes, picante sauce, garlic, and cumin. Bring to boiling; reduce heat. Simmer, uncovered, for 10 minutes. Stir in beans. Spray a 2-quart rectangular baking dish with nonstick coating. Spread one-third of the bean mixture over bottom of the dish. Top with half of the tortillas, overlapping as necessary, and half of the cheese. Add another one-third of the bean mixture, then remaining tortillas and bean mixture. Cover and bake in a 350 degree oven for 35 to 40 minutes or until heated through. Sprinkle with remaining cheese. Let stand for 10 minutes. If desired, place some shredded lettuce on each serving plate. To serve, cut casserole into squares and place atop lettuce. Garnish with chili peppers, if desired. Makes 6 to 8 main-dish servings.

**Nutritional Information:** per serving - calories: 248, total fat: 4g, saturated fat: 1g, cholesterol: 0mg, carbohydrate: 40g, fiber: 5g, protein: 15g

Cooking Hints: Salmon is done when it turns from translucent to opaque (solid color). Test for doneness by placing a fork in the thickest part of the fish. The fish should flake easily when pierced with a fork. Two to three pounds of fish will cook in approximately 20 to 30 minutes. Another way to determine cooking time uses the thickness of the fish fillet. Measure the fish fillet at the thickest point and allow about 10 minutes of cooking time per inch of fish fillet. The number of servings depends upon the size of the salmon fillet. A serving is approximately 3 to 4 ounces of fish, so a one-pound (16 ounce) fish fillet will make 4 servings (Per 4 servings of salmon fillet: approx. per serving: 175 calories; 3g carbohydrate; 25g protein; 7g fat).

Salmon is a great source of omega-3 fat. This is a healthy type of fat in the diet. Research tells us that eating more omega-3 fat may decrease risk of several types of cancer, heart disease, stroke, hypertension, and diabetes. Eating omega-3 rich fish even appears to reduce risk of hematological ('blood') cancers, including multiple myeloma!

# Unit of the Month C2CEN, Portsmouth VA



C2CEN's wellness program goes beyond monthly physical fitness assessments and monitoring for promoting unit health and wellness. C2CEN UHPCs focus on Wellness through approaches that encourage participation by all as well as promote organizational

identity & esprit-de-corps. Developing an internal network of fitness "peers" or teammates (formal or informal) will increase individuals' long-term commitment to and participation in wellness activities.

UHPCs conduct activities such as biannual blood pressure/cholesterol checks, Denim Day, and Healthy Heart Day. Physical wellness is encouraged with team competition in the bimonthly C2CEN Fitness Bowl, in intramural sports, and in special ISC events such as Crews into Shape and "Fitness Happens in February." Individual and military team participation is encouraged in the annual 5K run/walk for the ISC Health Fair, USCG's 200-mile relay Tom's Run/Bear Run, and in local events such as Shamrock Marathon & 8K, Marine Corps Marathon, and Polar Plunge. Cubicle exercises encourage team building and promote stress management. The use of healthy recipes is encouraged in the Chili Cookoff and potlucks. The Wellness Committee works with the Morale Committee. In addition to incentives from participation in the Fit for Life Program, UHPCs hand craft items such pins or awards for special events and print out specially designed certificates.

One of the special events was "wear Red Day" to help raise the awareness of heart health. The command supported the wearing of red by crewmembers (see picture below) and brought in a guest lecturer on the subject of Heart Health. Red shirt pins and red heart pins were hand crafted for the crew to wear to honor loved ones who had survived a heart attack or in memory of those who had passed away.



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